



# TECHNOLOGY 2025

FROM AI TO WI-FI-CONTROLLED WAREWASHING, WE LOOK AT THE CUTTING-EDGE TECH SHAPING THE FOODSERVICE OF THE FUTURE



## CHANGE STARTS ON THE INSIDE.

At LTI, we've been helping operators change the way food is served for more than 70 years – and it all starts on the inside of the counter with our innovative **SERVING TECHNOLOGY**.

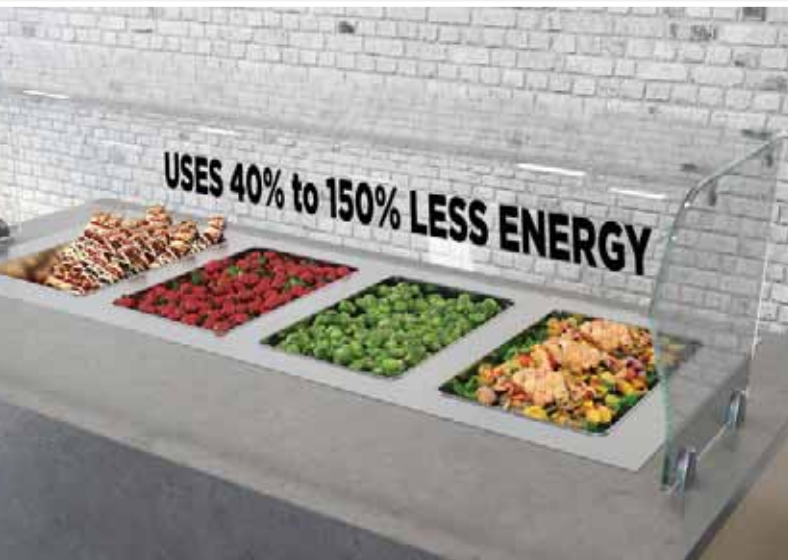
Our patented **QUICKSWITCH** is far more than just a hot well drop-in: each well can switch between serving hot, cold or frozen food **independently**, enabling operators to serve hot foods adjacent to cold foods.

And our energy-efficient **THERMALWELL** saves labor and utility costs and can be used with or **without water**.

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**Changing**  
how food is served.™



 **ThermalWell**™

# WELCOME

## New technology in foodservice can help operators to run a leaner, greener and smarter operation

As with so many other areas of 21st century life, when we need to solve a problem in foodservice, it is often technology that comes to the rescue.

In these pages you will find 10 emerging technologies that we believe are set to make their mark or continue their ascent in the foodservice sector, from nanotechnology and radio frequency identification to ventless equipment and Wi-Fi controlled warewashing.

The pandemic that took us by surprise and continues to challenge everything we understood about the world, fits right into a picture of accelerating innovation. Covid-19 has introduced behaviors and concepts that felt alien to many – such as social distancing – but others were already taking hold in our world; the trend for contactless and touchless technology is certainly set to be propelled by the pandemic.

And technology still has a job to do in dealing with the issues that we grappled with in pre-Covid times. A universal issue in recent years was the trend for shrinking kitchen spaces, challenging manufacturers to come up with smarter compact and multifunctional equipment

Similarly, the increased awareness of the threat posed by climate change among the dining public long ago brought a demand for a greener operation. New generations of consumers demand environmentally sensible behavior from the companies they choose to spend with. For businesses there is commercial as well as environmental imperative to keep utilizing the technology that can help to minimize food waste and reduce energy usage.

Manufacturers and operators across the world face a constant challenge to stay on top of new technology. The race for greener, leaner and smarter equipment is a healthy one where everybody wins. If technology is set to take center stage, consultants and manufacturers need to stay informed to make it work for operators in all market segments.

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# WELBILT

## MAKE THE CONNECTION

Welbilt's Ramesh Tirumala, director of digital strategy engineering, Linda Brugler, director of KitchenConnect and Kirk Goss, VP consultant relations, discuss how Covid-19 has accelerated the need for a fully connected kitchen

### What challenges are operators facing in a post-pandemic environment?

The post-pandemic foodservice environment for operators has altered the way that both the FSR and QSR channels need to operate in order to provide access to their products in an ever-changing world of consumer expectations.

The list of challenges continues to stack up. Cleaning and sanitation protocol changes require additional focus. Workflow modifications in equipment and layout back-of-house, to assist in curbside pick-up, drive-thru and third-party delivery, are challenges all segments have to manage with a reduced labor force.

There are also restrictions on service accessing back-of-house. Operators should utilize their equipment choices and leverage all they can from connected, smart appliances. Smart appliances not only help monitor equipment for food safety and potential service needs, but also provide savings by reducing food loss through automated communication throughout the kitchen. This functionality also manages the number of tasks the reduced labor force will have to oversee.

A fully connected kitchen has been a hot topic for decades; however, it is slowly becoming a commercially viable option due to increasing labor costs and the recent evolution in 3G/5G network technology. It's Welbilt's view that Covid-19 has only quickened the pace.

### What does 'born digital' mean at Welbilt?

At Welbilt being "born digital" is part of our New Product Introduction (NPI) strategy. All new products, at their initial design gate, are evaluated for their connectivity potential. This evaluation is hardwired into our marketing and product requirements procedure. It considers multiple end-user audiences that engage with the appliance and their connected needs. These needs are worked into the user interface embedded within our touchscreen controls.

As Welbilt and the end-users learn more over time, through data supplied by smart appliances, those learnings will drive unforeseen needs. The focus centers around the opportunities the data has uncovered. For example, Welbilt recently conducted a product rollout with a major chain where we collectively implemented over 138 software revisions within six months while we progressed through our alpha and beta field tests. Some of those software upgrades were simple adjustments to pre-cook prep instructions and post-cleaning procedures; while other adjustments were more complex – monitoring the input from the line cook and measuring those responses against various devices within the appliance to ensure operational procedures were being followed. As you can see, being "born digital" is much more than enabling new menu pushes from the cloud.



Connectivity takes into account the ease of operation for the end-user

### Why does this also appeal to consultants?

Consultants are faced with the challenges we discussed earlier, compounded by the multiple foodservice venues and menu types that are coming to them for guidance. Their ability to provide the right solution will be enhanced by the data from fully connected kitchens. For example, most fryer manufacturers supply their equipment in multiple vat configurations and varying vat sizes. With a connected fryer we can see its use pattern and create digital solutions to level load the appliance use so the fryer life cycle is extended. We can also improve oil filtration frequency, enabling savings by extending oil life. This shift from traditional analog controllers to touchscreen devices unlocks meaningful next-generation kitchen designs.

### What is Welbilt KitchenConnect and how it can benefit operators in a practical way?

KitchenConnect is a cloud-based software application platform hosted on Amazon

Web Services (AWS). The practical benefit to the end-user comes via the features that enable remote menu and software management, equipment service management, energy management, asset management and quality control.

Operators benefit by getting actionable insights from KitchenConnect through analysis of the equipment data and dashboard views that simplify the various back-of-house disciplines and critical decision-making processes. A key focus for most operators is the ability to remotely send a new menu or software updates to one or a fleet of connected appliances.

### How can KitchenConnect drive continuous improvements in performance for customers?

KitchenConnect provides unprecedented visibility to the operation of Welbilt equipment in our customers' locations. This allows both Welbilt and our customers to make data-driven decisions to improve performance.



Welbilt's "born digital" philosophy informs all marketing and product requirements



With a connected appliance food quality can be improved

This enables the life cycle of the appliance to be extended

Managing oil life has a big ROI to the foodservice

When equipment is down, sales suffer until the unit is repaired. The best ways to maximize uptime are to prevent failures and repair failures fast. With KitchenConnect, equipment performance can be monitored remotely, giving early warnings of potential downtime events.

### Why is it essential now for operators to be able to monitor and leverage data?

It starts with the problem the operator is trying to solve. Is it reduced drive-through times; is it improved food quality and consistency; or is it to reduce or control labor and food waste? These needs are universal within foodservice and having real operational data, is the only way to take calculated steps to improve your position. Operators must speak with their equipment supply chain partners around what their smart appliances communicate and what limitations they have relative to working within a closed or open network.

### How can KitchenConnect's augmented reality functionality deliver greater value?

Augmented Reality (AR) makes troubleshooting much easier as manuals become interactive and provide clear step-by-step instructions that reduce the need for call outs by enabling simple inhouse fixes to common issues. Remote

monitoring also aids offsite technical support and improved first time fix rates.

### How can technology such as KitchenConnect ultimately drive costs down for operators?

KitchenConnect ultimately helps drive costs down as follows:

- 1. Remote menu management:** The ability to push menus across thousands of units reduces costs involved with handling USBs, shipping, file format inaccuracies and issues with file transfers.
- 2. Service management:** Providing timely information and predicting critical errors ahead of time, can reduce equipment downtime and service expenses significantly.
- 3. Food safety:** Monitoring food temperature in a refrigerator or freezer and sending alerts when critical temperatures are reached can save money on food waste and prevent food-borne illness. Wear on the equipment and energy use will be reduced by monitoring and analyzing food production, equipment utilization, peak demand hours, and other workflow processes. This also enables efficient staffing levels. ■

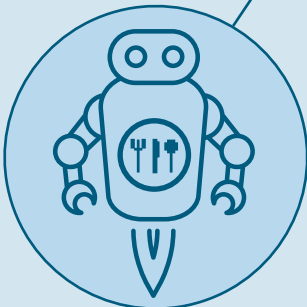
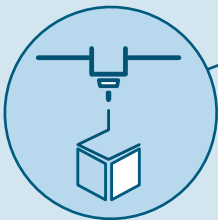
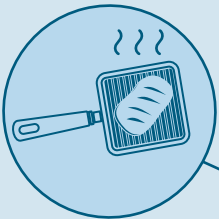
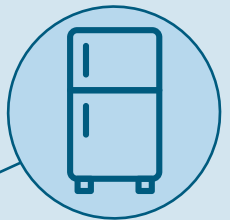
#### Further information

[welbilt.com/KitchenConnect/About](http://welbilt.com/KitchenConnect/About)

# THE FUTURE OF FOODSERVICE

## 10 TECHNOLOGIES THAT WILL CHANGE FOODSERVICE IN THE NEXT FIVE YEARS

Innovation, large and small, has a significant role to play in the future of foodservice as the sector emerges from the debilitating constraints of the Covid-19 enforced lockdown, report Michael Jones, Tina Nielsen and Conor Carleton



**T**echnological innovation – whether working its magic behind the scenes, or positioned upfront and visible to impress and assist customers – has always played a critical role in the foodservice sector. And yet, this is a sector many believe is too slow to implement new technologies already powering other industries.

What is certain is that investigating new technology that could make a potential point of difference or a cost saving to a foodservice operator must now be especially high up the agenda for the consultant community. The backdrop of the Covid-19 pandemic, which has decimated the sector since the global lockdown was introduced in March 2020, has made that need all the more pressing. “As designers, we need to be shedding our antiquated ideas and habits and looking at every possible scenario, every piece of equipment, every available technology that might open up a new avenue of income for our clients,” says FCSI Associate and *Foodservice Consultant* columnist **Tim McDougald** of Clevenger Associates in Washington, US.

“Are we proposing every possible option? Are we pursuing every possible idea? Our clients hire us for our expertise, they need us to think of the things they don’t, or can’t. Now, more than ever, we need to re-evaluate our ideals, our thought processes and our theories of how typical commercial kitchens function. We need to continue to find new ways to think creatively and find solutions to the problems our clients are facing.”

In that spirit then, within these pages you will find 10 technologies (plus a few more for good measure) poised to make a difference to foodservice in the next

five years. Some of those listed here in alphabetical order, have been around for a number of years already, but have not yet been fully embraced by the sector, while others are more bleeding edge. All will play their part as the sector transitions from recovery and rebuilding.

### 1. Artificial intelligence/machine learning applications

Many areas of foodservice are being worked on where (artificial intelligence (AI) technology is proving to be absolutely critical. “AI is beginning to be integrated in guest order systems, web bots, training and other areas of the foodservice business,” says Georgia-based FCSI Associate **Jay Bandy**, president of Goliath Consulting Group.

“Web bots have taken off. It’s hard to go to a website of a company of any size without seeing them. Consumers will now make reservations on Facebook, even though they have a reservation app. So, having a bot there to capture any questions definitely helps out the customer. We’re also seeing operators using [Amazon’s] Alexa to place orders. Folks are getting much better at integrating these platforms.”

For consultant **Joseph Schumaker** FCSI of FoodSpace in Idaho, US, the foodservice industry has “always notoriously been behind on tech and we haven’t applied the same AI and machine learning techniques that other big data companies have to get the answers we need. Why do you think Amazon bought Whole Foods? It’s all about data acquisition – filling a data gap data they did not have.” Similarly, Schumaker sees



the industry being behind on machine learning implementation. “It can do things in a fraction of the time that it would take a human to analyze. We’re behind as an industry compared to retail and other industries that have employed these tactics,” he says.

“Ghost, host or virtual kitchen concepts are a new solution that require AI and Internet of Things (IoT) practices,” says consultant **Serdar Sağlamtunc** FCSI of DM Consulting Engineering LLC in Ankara, Turkey. “Now there are as many solutions as there are operators, but these should be integrated into one hub to serve all – it may be a cloud-type, collecting and distributing system to fit all types of applications. According to the recent data and information, there is a great demand to find a swift solution for ordering and delivering phases. RFID usage will support the delivery.”

Bandy agrees. “Really looking out into the future you’ll be able to take AI and connect the ordering system and the inventory system with actually producing the food. I think we’re a couple of years from really turning the corner on your robot AI-driven cooking equipment, but we’re not that far away.”



# MULTITERIA

## TECH TRANSFORMS K-12 FOODSERVICE

Multiteria brings K-12 foodservice up to date with the technological innovations of the Multiteria M-Power™



**F**oodservice delivery in our nation's schools hasn't changed much over the last 50 years. In fact, many of the serving products we see today were invented in the 1960s and 1970s, and the passion with which our school nutrition directors and their staff deliver service to students hasn't been matched by innovations in foodservice equipment. That changes with technologically driven designs.

### Technology redefined

Innovation and modern-day problems are creating two distinct technology paths to solve problems. Digital and electronic solutions are evolving for information transfer, connectivity, and transaction management. However, as today's engineers are applying solutions in the physical world, they are creating mechanically engineered innovations. These address issues including productivity, safety, sanitation,

employee retention, student retention, sustainability, even marketing and school spirit.

### Benefits for foodservice

Smart, innovative equipment designs are rooted in the knowledge required to make K-12 foodservice:

- safer
- easier and more efficient
- inviting for student and employee retention
- cost effective.

Because staff turnover can be high in K-12 cafeterias, it's important to utilize equipment that makes things easier for those operating the equipment. This reduces training time, makes service delivery easier and more enjoyable and, in some cases, it can help with staff retention.

Technology can also provide efficiency in service. Nowhere is that more important than in today's school

cafeterias, where students are often deterred from participating in school lunch programs because of the formula created by short lunch periods and long lines. Being fast and efficient not only helps maximize the impact of labor, but, more importantly, it directly influences the students.

Student participation, of course, is the most critical element of school lunch delivery. If full-paying students aren't buying meals, it makes delivery to the entire student body much more difficult in terms of the dollars and cents.

### The next step

Rooted in technological advances, the new M-Power™ series from Multiteria is the next step in scientifically designed school foodservice delivery. This new line was developed considering modern operator needs, to meet all the challenges without cutting any corners. With USB ports for charging laptops and phones, and optional





The new M-Power™ series from Multiteria; the next step in scientifically designed school foodservice delivery

infrared food temperature measurement, electronic technology is certainly part of the equation, but it's not the only part.

Multiteria's M-Power™ also includes:

- optional hinged kickplates
- patented Tight-Link system easily locks units together without tools, exposed fasteners, connectors or clips
- food safety glove dispensers that were incorporated into the design even before the Covid-19 outbreak
- on-board storage designed specifically for menu cards, laptops, and tablets
- spray bottle and sanitation supply storage in the doors
- narrow lightweight design for easy transport on floors and through doorways
- easily removable tray slides
- easily removable, dual-sided base panels for cleaning or to change out colors
- easily removable undershelf for easier cleaning
- engineered with no exposed fasteners for better look and easier cleaning

- new, extruded NSF aluminum lightweight foodguards with exciting powder coated colors
- engineered lightweight acrylic curved foodguard with friction hinge that lifts and stops where you want it. The easiest to clean, and load pans from either side easily
- complete industrial-designed aesthetic.

The industry's best investment to promote healthy eating and school spirit, the M-Power™ Series empowers operators to best serve students with today's technologies and style. M-Power™ was developed with technology to help make delivering school foodservice easier, more efficient, and more profitable. We invite you to learn more today. ■

**Further information**  
[multiteriausa.com/products/m-power/](http://multiteriausa.com/products/m-power/)



Multiteria's team creates mechanically engineered innovations to solve modern-day problems

It definitely has a future. They're great labor saving opportunities."

For Schumaker, it's all about operational efficiency. "Where AI comes in is its analyzing of data and taking the human out of the equation. A ghost kitchen is a great example of a place where this could really be applied as well. Doordash is an AI company. They are using analytics to throttle up and down everything from marketing, order flow, driver stats – all by machine learning and AI, not by humans," he says.

## 2. Contactless menus/POS

Contactless systems allow diners in restaurants to browse menus, order food, and pay from their table, which can help reduce labor costs – as waiting staff have fewer tasks – and speed up waiting times in restaurants. As part of an integrated contactless system, it can help to remove human error and even be more energy and resource efficient as menu changes can be implemented without the need to reprint paper menus.

Contactless can serve multiple functions, says Bandy, including "having the ability for the consumer to use their own device to place their order, browse the menu or look up the wine list and in chef-driven restaurants where you have ingredients that folks don't know, that's a great way for them to be able to get

information. It eliminates those awkward questions that people don't want to ask. It streamlines the process because that's integrated with the POS. It helps with order accuracy and takes away that awkward step in full-service restaurants where you have to wait until somebody brings a check to you," he says.

Bandy also believes contactless will help on tipping, "but also help on table turns in full-service, because you're going to probably shave off a few minutes in a process. So, quick returns, and then a higher average check. You're going to have more folks that are just going to be serving the table and making sure guests get what they want, but not having to worry about the order process," he says.

"Contactless is the buzzword because of Covid," says Schumaker. "Having said that, this is already where we were headed. Look at [San Francisco Robotic Coffee Bar] Cafe X: You have a robot that's making coffee, but there's a human barista telling me how to place my order through my app on my own device, talking to me about where the beans came from and the types of cups used. The human doesn't care about the robot in that moment, they care about the genuine human interaction with the barista. Contactless is about freeing up humans to be human, and talking to the guests and interacting and creating memorable experiences

through food and dining experiences."

Covid, says Schumaker will "accelerate the number of types of contactless technologies that are available to us" and also drive the cost of them down. "If we create a completely different operational flow of how people work in the face of a contactless environment, we're going to create a better experience for the guests which is going to drive satisfaction, revenue and profit."

## 3. Low GWP refrigeration

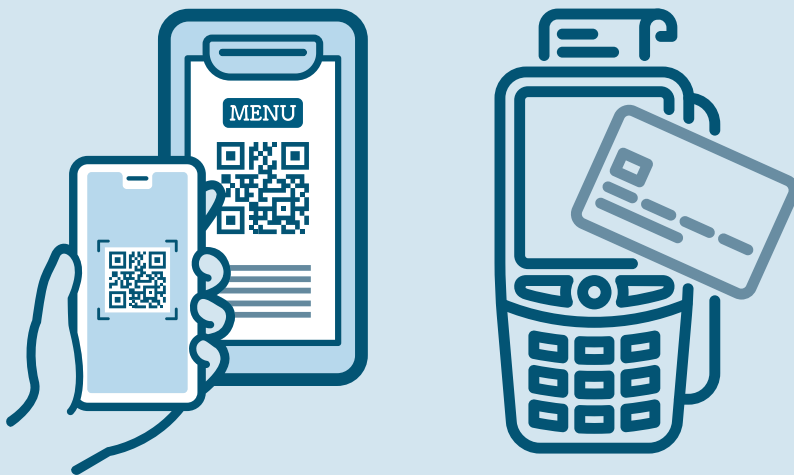
At the start of this year, refrigeration equipment across foodservice moved to low global warming potential (GWP) models as part of a wider focus on energy efficiency. This shift from high GWP models to low GWP models is setting the tone for new developments in refrigeration.

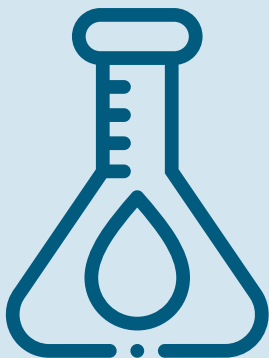
GWP, the heat absorbed by any greenhouse gas in the atmosphere, as a multiple of the heat that would be absorbed by the same mass of carbon dioxide (CO<sub>2</sub>), was the focus of legislation that came into force on 1 January 2020. The regulation, outlawing the usage of R404A, a highly damaging refrigerant gas, in new equipment.

Some of the more eye-catching energy-saving product innovation to hit the commercial kitchen equipment market in recent years include glass door refrigeration models, such as Hoshizaki-Gram's Eco Plus KG140 and Adande's Aircell Grab and Go energy efficient refrigerator cabinet.

Sağlamtunç believes the technology is a potential game-changer. "The use of this process with renewable biomass is one of the few carbon abatement technologies that can be used in a 'carbon-negative' mode – actually taking carbon dioxide out of the atmosphere. Carbon dioxide is then transported by pipeline or by ship for safe storage," he says.

"Carbon dioxide is commonly used as an industrial liquid refrigerant but could also be effective in heating and cooling buildings in urban areas. CO<sub>2</sub> is known





to be the primary greenhouse gas, but it could also help slow global warming. We may consider future refrigerators as open source and without compressors and evaporators, which signs huge savings.”

#### 4. Nanotechnology

Covering diverse areas such as ingredients, packaging, supplements, storage, and food sensors, Nanotechnology can boast numerous benefits for foodservice. There have been four primary advances in this area: in agriculture (via the delivery of chemicals and pesticides and of growth hormones, nanochips for identity and tracking and nanosensors for plant or animal pathogen detection); food processing (flavor enhancers and nanoparticles to remove pathogens from food); food packaging (biodegradable nanosensors for food temperature and time monitoring; and supplements – creating nanosize powders to increase absorption of nutrients).

Nanotechnology has also enabled lab-grown, synthetic meat (scientifically speaking, it's not strictly nanotechnology, but the innovation does involve small structures) to be served by operators. “Meat, without killing animals or the environment, should sound perfect,” says Sağlamtuñç. “Meat grown in a laboratory from cultured cells is turning that vision into a reality. Several start-ups are



developing lab-grown beef, pork, poultry and seafood.”

#### 5. Power Over Ethernet (POE)

As a technology dating back to 1997 when it was invented by semiconductor company PowerDsine, Power over Ethernet (POE) simply describes a system that pass electric power along with data on Ethernet cables. This allows one cable to simultaneously provide a data connection and power – over time it has been used in solutions including security cameras and VoIP phones.

POE helps restaurants lower costs and protect the hardware while streamlining operations and – on top of these – the technology also comes with added energy efficiencies.

One example of the technology is that developed by restaurant efficiency specialist Kitchen Armor. Its All-in One Android touch screen employs POE, eliminating the need and expense of electrical outlets at each station, as well as power supplies and cable management requirements that typically accompany other kitchen display system hardware solutions. This in turn reduces risk of failure and makes it easy to trouble shoot.

There's another potential health and safety benefit with POE as the reduced need for wires helps to keep kitchens clutter-free, eliminating trip risks. POE is

another technology where innovation is taking place continuously – among recent developments is a system with water resistant capabilities for use in restaurant kitchens.

#### 6. Radio Frequency Identification (RFID)/ Camera technology

Essentially the adoption of technology that uses radio waves to collect and transfer data, radio frequency identification (RFID) provides real-time traceability, communication and location data, which is valuable for the safe delivery of foodservices.

“RFID has been around supply chain for quite a while,” says Bandy. “Being able to build a track inventory that comes into restaurant and then goes out of the restaurant is exciting. RFID technology is now being integrated with POS systems. So, it loops everything together. Also, from a food safety perspective, there's lots of impact that RFID will continue to have. It's a good substitute for beacon technology, which is out there as well to help monitor temperature, but a less expensive way to do that technology.”

One of the big challenges with RFID, says Schumaker is because it is a short-range communication. “It was designed to be that way. So, high-power RFID is actually very expensive, and is cost prohibitive for foodservice at this moment to use. The contactless, POS RFID is actually quite effective in tracking what is in a unit. Byte Foods installed RFID tech into a refrigerator. It put a locking mechanism on the front door with a credit card reader, you swipe your card to open the door. And then as soon as you close the door, the machine takes an RFID inventory of everything inside of itself and then charges you for whatever you took. RFID is also used as a POS transaction point – because a lot of these systems actually tie off to either a credit card or a loaded value card – and also in people tracking and consumption,” he says.

Further down the line though, Schumaker believes camera technology

“is going to actually slay RFID and put it to bed completely in the next five to 10 years. RFID will die because the camera technology has gotten so good. The problem with camera technology is we start getting into privacy conversations – what does the system know about me? How much is it tracking – but the camera is capable of doing everything that’s happening in that Byte machine. It’s capable of everything that’s happening in that badge, door reader and it’s capable of 1,000 other things. As an industry, we are very behind in investing in camera technologies that would do lot of this work for us. It can identify food temps, warewashing issues, handwashing issues and employee interaction issues. Camera technology is the big untapped future – we’ve got to get into that now.”

**7. Robotics and robotic delivery**

Arguably one of the most talked about new technologies in foodservice in recent times, the introduction of robotics has genuine game-changing potential.

Staffing challenges and narrow profit margins are among the incentives for operators to look to implementing robotics.

**Vinoo Mehera** FCSI of Switzerland’s promaFox says it’s another area where he has noticed growth, but that



remains a work in progress. “In the case of production kitchens we do see a lot of potential with such technologies and with the shortage and cost of qualified personnel, this is definitely an area that will develop rapidly,” he says, adding that the Covid-19 pandemic will only serve to further propel the implementation of robotics. “It helps to ensure higher levels of hygiene with less risk of human intervention and thereby risk to the customers,” he says.

The advantages robotics bring are many: it reduces labor expenditure and removes the risk for human error. It comes with added facilities to track preparation and delivery while providing a personalized service.

More recently we have seen robots replacing people in food preparation settings, doing everything from flipping burgers to pouring cups of coffee or scooping ice cream. An indication of the increased uptake might be found in Dexai Robotics’s oversubscribed \$5.5m seed fund earlier this year. Dexai’s invention,

Alfred, is touted as the only robotic chef to work in existing kitchens.

“Alfred can be dropped into existing kitchens because its AI software recognizes its surroundings and adapts to the task at hand,” said David MS Johnson, CEO and co-founder

of Dexia Robotics. “Because Alfred uses standard utensils, it can make ice cream sundaes for one customer, quinoa bowls for another, and poke for a third. We’re teaching robots how to ‘see’ and identify different objects and foodstuff, and prepare the delicious recipes that people already know and enjoy.”

Companies including Domino’s have given us a glimpse of what the future looks like – the pizza company announced the arrival of DOM, the autonomous delivery vehicle, a four-wheeled vehicle with compartments to keep food hot while driving on the sidewalk from the store to the customer’s door. While Domino’s doesn’t expect DOM to hit the road just yet, it gives us a clear indication of where we are heading.

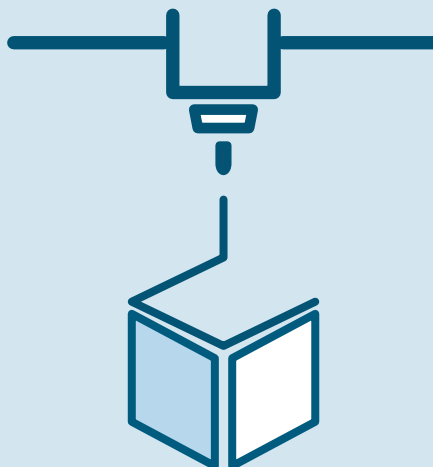
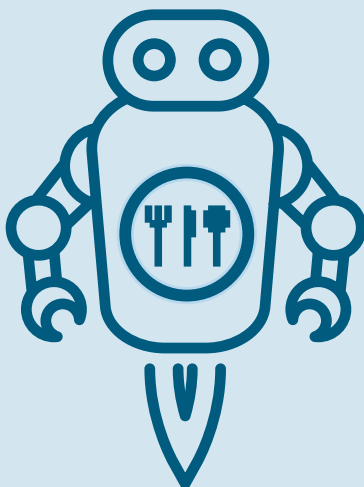
As far as front of house goes, however, Mehera doubts it will make the same difference. “We believe that this is more emotional and should be managed by humans. Having said that we are sure that there will be foodservice outlets especially in the QSR space that will use robotics to serve customers.”

**8. 3D printing**

There has long been talk of a new dawn in food production brought on by 3D printing. The technology involves pureed food, placed in cartridges, being layered by the 3D printer.

For a chef or operator the potential in using 3D printers is huge. It is an obvious way to standardize products, making it particularly appealing to pastry chefs who aim for perfectly identical looking plates of intricate desserts. Other obvious advantages include a much-reduced requirement for manpower and labor intensity, which in turn saves costs. In senior residential care homes 3D printing allows cooks to prepare highly nutritional food in an easily digestible manner.

American manufacturer 3D Systems was the first to bring a food printer to market in 2014 when it launched the Chefjet and Chefjet Pro at the Consumer Electronics Show in Las Vegas.



# ScanBox

*Bringing your food with care*



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Through these difficult and challenging times, we need to gather our forces and collaborate! Over the past years, we have invested in technology in order for us to be ready for digital availability. This means we are staying open! We are here to help you whether you need to brainstorm how to adopt your business to the new circumstances, supply you with demo units and immediate delivery of products from our stock, or any other support. We are available for phone calls, emails and virtual meetings – which ever is most convenient for you!

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## Additional technologies to watch

**Geofencing, Bluetooth and phone location beacons** – where guests and participation are tracked – are all set to grow. These technologies “have applications throughout the restaurant and beyond. This is especially important now with takeout, curbside and delivery orders,” says Bandy.

**Non-chemical sanitizing systems** are “a good technology application using ozone and simply water as a cleaning media,” says Sağlamtuñç. “The effective cleaning time is 4-6 hours depending on the configuration and there’s no cost for chemicals, no storage area needed and no expiration date.” (tersano.com)

Sağlamtuñç also heralds **renewable drinking water supplies**, from companies such as Source (source.co) whereby water is created from air by using solar energy. “It is totally free and environmentally friendly solution,” he says. He also cites the advent of **solar cooking** (examples are sunoven.com and gosun.co). “Though the technology is rather primitive, there is a vast opportunity to invest this system to expand its cooking capabilities, especially in summer time. There are many savings to be made.”

“We currently view this still as work in progress and do not see this being used in the professional kitchens that we plan,” says Mehera. “Going forward we do see it as an alternative to develop and deliver good quality food without having experts – such as cooks – to make it. We do, however, feel that this will be popular in the case of mass production and not for the typical restaurant or a la carte kitchen.”

This technology is definitely one to watch in food production and foodservice – and it’s continually evolving. In the years since its inception, it has been applied to create a constantly expanding range of foods in step with new trends. Consider Legendary Vish, a company creating 3D-printed ‘salmon’ fillets made from plant-based ingredients to cater to a new generation of vegan and vegetarian diners.

### 9. Ventless hood systems

Circulating air and collecting grease without the need for exterior ventilation, ventless equipment captures, removes and reduces food particles, steam, fumes and odors produced by cooking vapors. It therefore allows for hoods in places previously unviable, such as food vans or historic buildings.

“Post-Covid, the possibility for ventless technology is unlimited. The technology lends itself to creating more points of service. And that’s critically important in defining both profitability and also safety and security,” **William Caruso**

FFCSI, president of FCSI Worldwide told our recent roundtable on ventless innovation in stadia foodservice. Fellow consultant **Kristin Sede** FCSI of S2O agrees. “One of the things we’re going to see in areas of future expansion is in cost savings. For us to continue to keep evolving we have to do two things. We have to look at long-term costs associated and the production thru-put,” she says. “We are limited to size and function and the amount of KWs we can put through. So, there are

limitations, but [ventless] is a game-changer, no doubt.”

### 10. Wi-Fi-controlled warewashing

The drive towards greener and leaner ways of working across the foodservice sector has thrown up many examples of innovation and ingenuity; warewashing is one segment where real in-roads have been made.

Wi-Fi controlled warewashing can be tightly monitored, allowing operators to adapt frequency and load to conditions. Crucially, it helps to increase energy and water efficiency through the monitoring of water levels and temperature, which ultimately is converted to financial gains.

Warewashers, connected via Wi-Fi, send data to a central server where it is analyzed, making for a more efficient warewashing system. It can be monitored from anywhere via an app, which adds safety and offers optimization options.

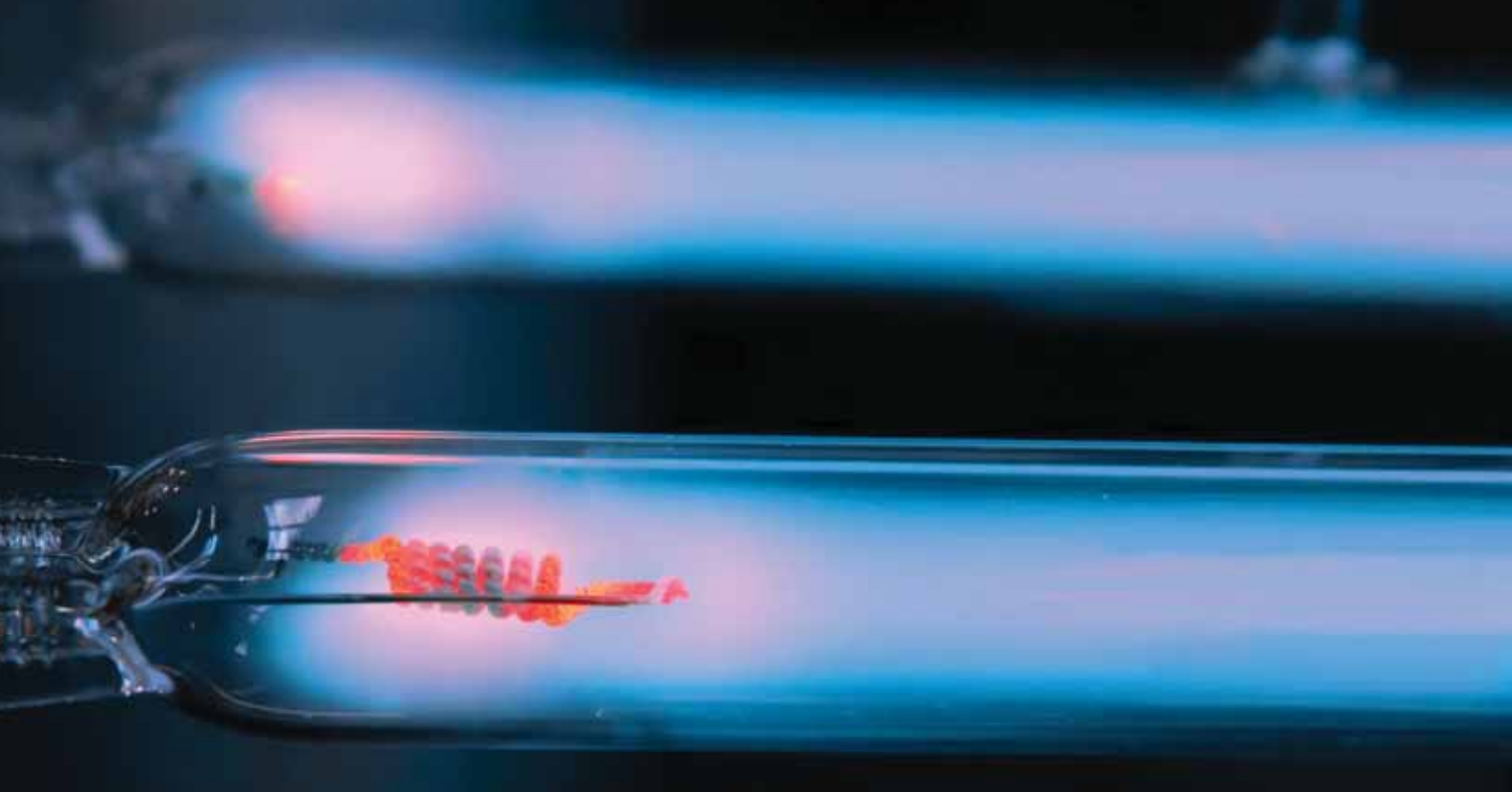
Warewashing is just one of many areas in which Wi-Fi is advancing rapidly, according to Mehera.

“There are inherent advantages in being able to control your equipment remotely, get necessary information and statistics, error messaging as well as remote maintenance,”

he says. “We see Wi-Fi, currently as the most advanced technology with the highest user acceptance and the one progressing the digital transition in the foodservice industry.”

Over time, several manufacturers have brought to market different versions of Wi-Fi-controlled warewashing systems. Brian Hannon, co-founder and director of Super 8 Restaurants, comprising three restaurants in London, speaks highly of Connected Wash from Winterhalter, which records all operating data and makes it available for managers to easily access. “It lets us keep full accurate records of each wash, as well as helping to identify issues and get them fixed quickly,” he says. ■

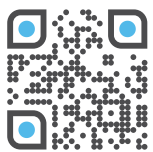




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